

THE "HAND-STAND" HABIT OF THE SPOTTED SKUNK

BY CHARLES EUGENE JOHNSON

In the Journal of Mammalogy for February, 1920, there appeared a note by A. H. Howell with regard to a Florida spotted skunk which he had suddenly met with, standing erect on its fore legs. Seton, in the following (May) number of the Journal tells of having seen a similar attitude assumed by the large northern skunk (*Mephitis putida*), when the animal apparently was in a playful mood. Since little seems to be known concerning this rather peculiar habit among skunks the following notes which I was fortunate enough to obtain a few weeks ago may be of interest.

On December 28, 1920, while in the field near Lawrence, I came upon one of the little spotted skunks (*Spilogale interrupta*), common in this region, which at the time was traveling leisurely across a wheat field. It was 11 o'clock in the forenoon and the day was very mild, the temperature being about 50°. When first seen the skunk was about 60 or 70 yards distant. I got out my kodak and gave chase with the intention only of securing a photograph.

When the skunk saw me as I came running toward it, it hastened its gait somewhat and arched its tail and waved it menacingly. I had set the focus at 8 feet and as I caught up with the skunk I dropped into a fast walk and then took a few quick steps toward it in order to get my distance. As I did so, but before I could properly aim the kodak and press the bulb, the skunk, which was proceeding at a rather slow, deliberate trot, suddenly threw its hindquarters into the air and actually ran a few steps on its fore legs. Its body seemed almost perpendicular and the hind legs were spread apart but were also drawn up somewhat toward the flanks; the tail was erect but drooped more or less over the back and sides and twitched threateningly. As the animal threw up its hindquarters it also turned slightly on its fore legs and twisted its body in an endeavor to face me. I stopped short but the skunk immediately dropped back to all fours again and continued running. In making further attempts to get a photograph of the animal I discovered to my great disgust that the shutter, long unused, refused to function properly, so that I ceased my efforts in this direction and gave my attention entirely to the skunk.

On three separate occasions while endeavoring to get a photograph of the skunk I quickly stepped up to within about 6 feet of it as it was running before me and each time the animal performed a perfect

"hand-stand" act. After my last futile photographic effort I stopped a moment to examine the shutter and the skunk meantime gained a little distance. I hastened after it and when near enough threw a clod of earth which struck the ground within a foot or two of its side. Like a flash the skunk threw up its hind legs and half faced about, pivoting on its fore legs, and uttered a hissing snarl. The "hand-stand" attitude, however, was not maintained for more than about half a second, the whole performance being but a momentary pause on the part of the animal to defend itself. Following closer after a brief interval I again startled it, this time by suddenly clapping my hands together and hissing. The skunk merely tossed up its rear to an angle of about 45° and kept on going.

We had now drawn near the edge of the field and desiring to experiment further I endeavored to head the skunk back in the direction whence it came. In this I succeeded for a time but only after much clapping of hands, hissing and various other outbursts on my part. In every instance when I got up rather close to the animal, within 8 or 9 feet to the best of my judgment, and suddenly startled it, it gave the "hand-stand" reaction. Altogether in the relatively short time that I was occupied with this experiment I induced about a dozen of these reactions. A number of times, when I was at a little greater distance, the skunk did not raise its rear so high from the ground; but on several occasions, when I suddenly stepped up close, the body was held in a perfectly upright position with the head straining toward the horizontal.

The last performance the skunk made before I let it go was the most interesting one, and of longest duration. Despite my efforts to prevent it the animal had succeeded in working its way nearer and nearer to the edge of the field where there was cover and where it evidently had a retreat, for it was headed toward this place when it was first seen. A number of times this little beast actually charged me as I stepped in front of it while trying to turn it back, but I retreated hastily and it did not press the pursuit. The last time, however, I held my ground as the skunk bristled and charged directly at me. When within probably 8 or 9 feet of me it stopped abruptly and elevated its rear end, standing perfectly balanced on its fore legs for what seemed at least a couple of seconds. It did not need to turn this time in order to face me; its back was toward me, and its tail drooped slightly over the back as it was waved from side to side in a deliberate but somewhat jerky fashion. The attitude was so erect that the vent was completely exposed to view from where I stood, and was directed upwards.

It seemed as though the animal was endeavoring to aim the charge over its back at me, its instinct to face the enemy being too strong to permit it to turn about and thus be in a more favorable position to direct its weapon.

My companion, who had remained an interested spectator from a little distance, declared afterwards that whenever the skunk rose upon its fore feet a fine spray of vapor could be seen issuing from the vent. This I did not observe, probably because of my proximity and the angle of view. I was perfectly aware of course that discharges were being made. The anal sphincter was actively working whenever the erect posture was assumed; that is, when the skunk was in a position so that the vent could clearly be seen.

After witnessing the above-described performance of the spotted skunk I am strongly inclined to believe that what has here by way of brevity been referred to as the "hand-stand" attitude is a common habit of this and perhaps also other species of skunks, under certain conditions. It is manifestly a defensive attitude primarily, and seems to be taken for the purpose of better directing the discharge of the vile secretion with which nature has provided these animals. The above noted facts are not sufficient in themselves to permit too many inferences or conclusions to be drawn from them, but they at least appear significant. The idea suggested itself that the erect attitude may possibly be resorted to by the skunk, and especially against such of its enemies as stand up higher from the ground, in order to aim the fluid at the most vulnerable part, namely the face. Against an intruder as tall as a man, at close range, there would seem to be no other way to effectively place its shot. Instinctively it is aimed at the face; and the higher the target the greater the elevation of the weapon. If it were attacked by a small dog it hardly seems likely that the skunk would elevate its body to the extreme that has been observed when on its defense against man, for that would be to overshoot the mark. On the other hand it may be that by assuming this attitude the skunk is able more quickly to surround its entire person with a defensive zone. But such points must be left for future observations or experiments to decide.

Department of Zoology, University of Kansas, Lawrence, Kan.